

IN THE CLAIMS:

Please cancel claims 1-7, 12-14, 16 and 17.

Please amend claims 8 and 15.

LISTING OF CLAIMS

Claims 1-7 (Canceled)

Claim 8 (Currently Amended): A substrate processing vessel comprising:

a vessel body;

a cover adapted to be separatably and hermetically joined to the vessel body to define a processing space together with the vessel body;

a plurality of substrate support rods incorporated into the vessel body; and

a driving device adapted to vertically move the substrate support rods between a first vertical position and a second vertical position;
wherein:

each of the substrate support rods has a head adapted to support a substrate from below the same, and a shank extending downward from the head,

the vessel body is provided with a plurality of vertical bores each having an open upper end opening into the processing space, and the shanks of the substrate support rods are vertically movably inserted in the bores, respectively, and

the head of each substrate support rod is sized such that the head is unable to pass through the bore of the vessel body, and the heads of the substrate support rods are configured to close the open upper ends of the bores when the substrate support rods are held at the first vertical position, and

further wherein the driving device comprises:

arms respectively connected to the shanks of the plurality of substrate support rods projecting downward from lower ends of the bores of the vessel body, the arms being arranged under a bottom surface of the vessel body, and

a first air cylinder actuator adapted to move the arms vertically; and
further wherein the substrate processing vessel further comprising comprises:
an arm locking mechanism having a stopper, and
an actuator for moving the stopper to separatably engaging engage with one of the arms
to lock said arm so as to prevent upward movement of the substrate support rods and resultant
damage of the substrate when air to be supplied to the first air cylinder actuator is ~~down~~ reduced.

Claim 9 (Previously Presented): The substrate processing vessel according to claim 8
further comprising:

a second air cylinder actuator adapted to move the cover vertically between a raised
position and a lowered position of the cover; and
a cover locking mechanism having a stopper adapted to separatably engage with the
cover or a member fixed to the cover to lock the cover so as to prevent downward movement of
the cover and resultant collision of the cover with the substrate support rods when air to be
supplied to the second air cylinder actuator is down.

Claims 10-14 (Canceled)

Claim 15 (Currently Amended): A substrate processing vessel ~~according to claim 1~~
~~further~~ comprising:

a vessel body;
a cover adapted to be separatably and hermetically joined to the vessel body to define a
processing space together with the vessel body;
a plurality of substrate support rods incorporated into the vessel body; and
a driving device adapted to vertically move the substrate support rods between a first
vertical position and a second vertical position;
wherein:

each of the substrate support rods has a head adapted to support a substrate from below
the same, and a shank extending downward from the head,

the vessel body is provided with a plurality of vertical bores each having an open upper end opening into the processing space, and the shanks of the substrate support rods are vertically movably inserted in the bores, respectively,

the head of each substrate support rod is sized such that the head is unable to pass through the bore of the vessel body, and the heads of the substrate support rods are configured to close the open upper ends of the bores when the substrate support rods are held at the first vertical position,

further wherein said substrate processing vessel further comprises:

an actuator adapted to move the cover vertically, and

springs, with each spring being concentric around the axial axis through each of the substrate support rods, for pushing the substrate support rods upward; and

further wherein:

the cover is provided with a pressing member adapted to come into direct contact with the heads of the substrate support rods to depress the substrate support rods against resilience of the springs when the cover is lowered; and

the driving device includes the springs, the actuator and the pressing member.

Claims 16 and 17 (Canceled)